*Subject to approval of the ESPA Working Group*

# MINUTES OF THE JUNE 24, 2004, MEETING OF THE EASTERN SNAKE PLAIN AQUIFER WORKING GROUP EXPANDED NATURAL RESOURCES INTERIM COMMITTEE 9:30 a.m. Burley Inn, Burley Idaho

The meeting was called to order at 9:30 a.m. by Co-Chairman, Representative Dell Raybould. The following working group members were present: Co-Chairman, Senator Laird Noh, Senator Don Burtenshaw, Senator Brent Hill, Senator Clint Stennett, Senator Bert Marley, Representative JoAn Wood, Representative Jack Barraclough, Representative Tim Ridinger, and Representative Wendy Jaquet. Other committee members present were: Representative Scott Bedke, Representative Burt Stevenson, and Representative Pete Nielsen. Senator Stanley Williams, Senator Dean Cameron and Representative Maxine Bell were absent and excused. Speaker Bruce Newcomb and Representative Sharon Block were also in attendance.

Additional parties in attendance are set forth in sign up sheets maintained in the records of Legislative Services, marked as Attachment "A" of these minutes.

Following opening remarks of the co-chair, Senator Noh moved, and Representative Wood seconded, that the minutes of the April 22, 2004, meeting of the working group be approved. The minutes were approved by unanimous vote.

Mr. Charles Brockway, Brockway Engineering, addressed the group, presenting his analysis of the Eastern Snake River Plain Aquifer (ESRPA). A written copy of Mr. Brockway's power point presentation is on file in the records of Legislative Services, marked as Attachment "B" of these minutes.

Mr. Brockway set forth a number of points for the group's consideration during his presentation, including the following:

- The ESRPA is a single hydrologic unit;
- Long term aquifer water balance is essential for maintenance of spring flows and water levels;
- The ESRP Aquifer is "out of balance;"
- As evidenced by long term declines in:
  *Aquifer water levels
  * Spring flows
  * Snake River reach gains
- Long term declines in spring flows and water levels are indicators of an over-appropriated aquifer;
- Ground water pumping has resulted in over 2 million acre feet of consumptive

depletions from the aquifer;

- Only the stabilization and restoration of aquifer water balance can restore spring flows and river reach gains (springs);
- Changes in ground water depletions and artificial recharge can modify the water balance and restore spring flows and water levels in a reasonable time frame.

Mr. Brockway stated that input and output components must be equal in order for the aquifer to be in balance. He noted that some aquifers may not have definable spring outflows, hence, flows must be determined by aquifer water levels near the springs. According to Mr. Brockway, not all components of input and output are controllable but artificial recharge and pumping are controllable. Mr. Brockway stated that no long term change in storage occurs in a balanced aquifer.

Mr. Brockway went on to propose that an aquifer which is out of balance will exhibit long term excess of output compared to input or vice-versa. He noted that if output exceeds input then the difference must come from a negative change in storage. In addressing his point of analysis that the ESRPA is out of balance, Mr. Brockway provided the group with numerous historical examples of changes that have occurred in spring flows.

Mr. Brockway went on to note that the decreasing trend in certain spring flows is due to ground water pumping and changes in irrigation application (conversion to sprinkler). He also said that short term perturbations are due to fluctuations in total water supply (drought). Mr. Brockway also addressed a number of examples of declines in reach-gain as well as various well declines.

Mr. Brockway indicated that eventually the aquifer, as a system out of balance, will balance on its own. The problem is that we don't know where it would balance if we don't do something to bring it into balance. The aquifer's balance is affected by input and output components. In order to change the components, the aquifer could be artificially recharged, ground water irrigation areas could be converted back to surface water irrigation or pumping could be reduced to decrease consumptive depletions.

During his presentation, Mr. Brockway also enumerated a number of proposed objectives for the group's consideration:

- Stem the decline of springs and reach gain at 2004 levels. According to Mr. Brockway, success will depend on the longevity of the drought and the success of mitigation plans;
- Restore springs flows and drive water levels to target levels. Mr. Brockway stated that target levels should be defined using the new ground water model to guide in selection of appropriate tools and levels of implementation;
- Effective methods of mitigation and restoration can be devised to provide timely, real, spring flow responses;
- Methods of restoration are to be determined.

Mr. Brockway stated that the time effect of consumptive depletions in Water District 130 on spring flows from Thousand Springs (Milner-King Hill) show that it takes about thirty years or more for the near full effect of pumping to be manifested in reduced spring flows. However, he added, that forty-five percent occurs by the end of five years and sixty percent by the end of ten years. According to Mr. Brockway, reductions of depletions or recharge within Water District 130 will show the same response. He went on to state that results of mitigation programs can show real results in a reasonable time frame. He continued that in his opinion, the full impact of historical ground water irrigation pumping will likely require implementation of mitigation programs (recharge, conversion, curtailment) over the entire Eastern Snake River Plain Aquifer.

A question and answer period followed.

Mr. Larry Cope of Clear Springs Foods was the next speaker to address the working group. He provided the group with a summary of goals from the standpoint of Clear Springs Foods. According to Mr. Cope, the overreaching goal should be to bring the aquifer and Snake River back into balance by ensuring that ground water pumping withdrawals are equal to or less than natural and incidental recharge to the system. He went on to clarify that an appropriate expression of that goal might be the development of a program of water rights administration and management, consistent with Idaho's prior appropriation doctrine, which will ensure the long-term sustainability and restoration of the aquifer and Snake River such that depletions from junior ground water pumping do not reduce natural discharges from the aquifer to springs and surface supplies. Mr. Cope also proposed the following additional goals:

- Take steps by the Spring of 2005, including recharge projects, conversions to surface water, and reduction in depletions (pumping), to stem the decline of key indicator springs, ground water levels and river reach gains through a net reduction in junior ground water depletions. According to Mr. Cope, indicator springs and river reach gains should not fall below 2004 levels.

- Provide short-term relief while actively pursuing intermediate and long-term goals. The relief should include the implementation of infrastructure improvements or changes to existing systems, or otherwise develop mechanisms, to enable the delivery of mitigation water to those senior water rights impacted by junior ground water depletions, provide mitigation dollars to enable water right holders to remain viable until intermediate and long-term goals take effect where mitigation water is not available, and delivery of water through actions otherwise not covered under the initial overreaching goal noted above, where shortages would result in serious reduction or curtailment of business viability.

- Provide intermediate and timely stabilization of the source of surface (spring) water and ground water rights throughout the Snake River reach from King Hill to Shelley acknowledging the extent of cumulative depletions caused by ground water withdrawals from the Eastern Snake River Plain Aquifer. According to Mr.

Cope, management actions taken shall be in recognition of the depletions identified unless agreed to by all parties. Two primary tools were identified: curtailment of the use of water under junior water rights through priority administration, and providing the legal, technical and policy framework necessary to allow junior water rights holders to continue withdrawals by providing mitigation or replacement water that will prevent injury to senior water rights. All must be consistent with the prior appropriation doctrine. (Mr. Cope then outlined a number of monitoring proposals which are set forth in his written summary of goals maintained in the records of Legislative Services, marked as Attachment "C" of these minutes.)

- In order to establish reasonable long-term restoration objectives for aquifer levels, spring flows and Snake River reach gains, identify the reasonable levels of restoration that might be expected over the long-term using the model and such mitigation actions as managed recharge, curtailment, conversions, etc, and provide an identifiable time frame of ten to fifteen years predicated on an expected level of long-term restoration.

- Identify funding mechanisms to assist attaining stabilization and restoration.

Mr. Cope then set forth Clear Spring's expectations:

- That the State of Idaho and the interim committee reaffirm the protections of the prior appropriation doctrine, state law and the Idaho Constitution. In addition, Clear Springs expects an affirmation that aquaculture water rights are not subordinate to agriculture irrigation or hydropower rights, and an affirmation of the SRBA process and protection of decreed water rights.

- A state commitment to bring the ESPA and Snake River back into balance and bring certainty to the current and future economic fabric of water users and related interests (people) in the region.

- Immediate and meaningful action commencing March, 2005, that begins to correct the imbalance.

- Clear Springs will need to see a plan that is supportable and based on best science (the model) that forecasts goal achievement.

- Progress must be measured by results (indicator spring flow, ground water levels and Snake River reach gains).

Mr. Cope concluded by noting that Clear Springs believes the issue does not come down to surface versus ground water but rather to the priority doctrine.

Ms. Linda Lemmon of the Thousand Springs Water Users Association addressed the group next. A copy of the association's written comments are maintained in the records of Legislative Services, marked as Attachment "D" of these minutes.

Ms. Lemmon told the group about the purpose for formation of the association. According to Ms. Lemmon, individuals and entities that were given the opportunity to become members in the association hold over 650 spring water rights between Bliss and Twin Falls dating from 1878 to the present. She also clarified that a single water right in some instances serves multiple users.

Ms. Lemmon commented on the importance of the water rights to the people in the area, their business and employees and to the communities in the area and that chronic declines in the spring flows threaten their livelihoods. In some instances, Ms. Lemmon noted, people have lost their drinking water sources and have had to install filters to keep debris from coming through their taps. She also noted instances where flows are so low that ponds freeze and waterfowl no longer land thereby directly affecting public and private hunting operations.

Ms. Lemmon clarified for the group and the audience that only about twenty-five percent of the spring rights in the Thousand Springs reach are for fish. The greatest beneficial use of water in the area is for irrigation and other uses include stock water, domestic and commercial use, minimum instream flow, recreation, aesthetics, wildlife, fire protection, and power generation. She also commented that those that have expressed the view that buying out the fish hatcheries will solve the problem are incorrect in that buying out a nonconsumptive use will not solve the problem.

Ms. Lemmon noted that first and foremost, water rights across the ESPA must be respected and enforced as valuable property rights, and administered as decreed or licensed. According to Ms. Lemmon there should be no administrative or legislative alteration of the prior appropriation doctrine.

She continued that restoration of the Thousand Springs requires recovery of the ESPA from the effects of both ground water withdrawals and drought. The association supports the concept of a central entity to monitor and administer recharge efforts, and stated there is a need for some flexibility to recharge outside the normal irrigation season. Spring users, like ground water users, are asking for assurances to make business plans from year to year.

The association also supports the concept that adequate mitigation and relief is an acceptable, interim alternative to mandatory curtailment. The association, according to Ms. Lemmon, prefers mitigation that provides usable water directly to the springs and their diversions. To that end, they believe that both private and government funded projects to increase spring water supplies and improve efficiencies should be continued and expanded. Ms. Lemmon continued that to the extent that water cannot be provided, their members must receive compensation at a recognized rate for water, for the depletionary effects of junior ground water withdrawals. She also noted that the association recognizes that financial mitigation and drought

relief may not be adequate substitutes for water for specific spring users, such as cities.

Vince Alberdi of the Twin Falls Canal Company addressed the group next. He provided the group with some history about the Twin Falls Canal Company, the number of water users, and area that Twin Falls Canal Company serves. Typically, the company first diverts water from the watershed until about July 1 each year. After that date, until the end of the season, they supplement with storage. So far this year, they have had reductions of twenty percent and may have to reduce again by the end of the season. In the past, they have been able to count on water in the American Falls Reservoir to get them through to the end of the season. They can no longer do that. The company's water rights are senior by decades and they have been patient with mitigation efforts. He commented that Mr. Cope provided a good description of their expectations. Mr. Alberdi went on to note that Twin Falls lives and dies with reach gains from Blackfoot to Neely and that some action has to happen now.

Dan Shoemaker, Chairman of the Twin Falls Canal Company Board, was the next speaker to address the group. He reiterated some of the remarks made by Mr. Alberdi and discussed how the American Falls Springs, the Thousand Springs Reach, the natural flow at Blackfoot and Swan Falls all demonstrate the health of the aquifer. He also commented on the fact that the Twin Falls Canal Company has been very patient but that there has to be some action now with an emphasis on the prior appropriation doctrine. The canal company has been experiencing curtailment and it is having an effect on their economy now.

Ted Diehl of the North Side Canal Company addressed the group next. He noted that North Side depends on storage more than natural flow. They are at seventy percent curtailment now and neighbors are stepping forward to help each other. He has a lot of unhappy water users. He went on to note that there will undoubtedly be people that will be hurt, but they need to look at how to ease the pain. He indicated that he believes they will have to curtail somewhere, perhaps everyone will have to curtail. He noted that everyone has to pull together. He also said that as a result of losing so many acre feet annually at American Falls, the group should not expect American Falls to be a source for mitigation because they simply do not have it.

Tom Courtney, City of Twin Falls, was the next speaker. He told the group that stability is critical to Twin Falls. The city will deal with the future as long as they have a stable base and know what that is.

Ron Carlson was the next speaker. He clarified that the presentation was his personal presentation and that he was not speaking on behalf of any agency. The comments were solely his own based on his personal opinions of the history of Idaho water issues.

Mr. Carlson noted that water priorities in the state include domestic, mining, irrigation and manufacturing. He also addressed the history of the prior appropriation doctrine.

In terms of water supply, Mr. Carlson noted that springs were treated independently of the aquifer and that there was separate ground water and surface water administration. Changes occurred to this approach after Swan Falls and we now have a conjunctive management

approach. He posed the question as to whether springs were ground water or surface water.

Mr. Carlson discussed the basics of water supply in that all our water originates from precipitation. Its destiny is surface, springs, storage, percolation or evaporation. He opined that when the water board set minimum flows at Milner at zero, the message was that the water should be stored in the aquifer.

Mr. Carlson noted that ninety-seven percent of our water is ground water and only three percent is surface water. If surface water is used first, our choice is to either sacrifice crops or lose more reservoir water.

He continued noting that in the last three years, we are down one full year of water supply. He noted that in his opinion, reductions at Heise account for one hundred percent of the decline we have seen.

Mr. Carlson stated that 1977 was the driest year that Idaho has ever had. From 1987 to 1994 there was a seven year drought, the longest in history. Now, as of 2000, we've started into another cycle. The result is that we have a cumulative stress on the system.

Historically, he said, surface water irrigators realized that Heise was feast or famine. As a result, the dam was put in at Jackson. He went on to discuss comparisons between Lake Eire and the Eastern Snake River Plain Aquifer.

Mr. Carlson posed the question as to whether there was a water right for storage in the aquifer. He noted that by 1900, the water above Blackfoot was all appropriated. If there was no storage, the river would be dry at Blackfoot. Milner was built in the 1900s. Mr. Carlson said we rerouted the river there to the aquifer and out at Thousand Springs. He believes the battle is really over the storage in the system.

Mr. Carlson went on to provide that, with Swan Falls, all ground water rights, pre-1984, would not be curtailed for flow past Milner to meet the minimum requirements set. He said that Thousand Springs users were told that they might have to "chase their water."

Mr. Carlson said that in his opinion, the group has to decide what occurred with Swan Falls and live by that determination. The group has to ask whether there is an aquifer water right.

A question and answer period followed.

Representative Barraclough was the next speaker to address the group. He showed the group numerous viewgraphs depicting the aquifer and provided testimony relating to his experience with studying the aquifer in his lengthy previous work as a hydrologist.

Representative Barraclough noted that, in general, water in the aquifer travels at about two to ten feet per day. It takes about 200 years for water to travel from Ashton to Thousand Springs. Throughout the system, there are 65 springs flowing at 100 cfs or more, 11 of which

are at Thousand Springs.

Representative Barraclough described the flow lines of the aquifer. It has been determined that the upper 500 feet of the aquifer carries most of the water. He went on to describe the gradients of the aquifer and how those gradients affect the speed of the flow, discussing the Mud Lake area as well as the Great Rift which slow the flow of the water.

Representative Barraclough went on to note that, in terms of recharge, the Eastern Snake River Plain Aquifer is a good place for it. He discussed the effect of conversions to sprinklers where they have found fifty percent recharge with flood irrigation combined to only ten percent of recharge with sprinkler irrigation. He also told the group how INEEL has been spared the effects of the drought because of the depth of its wells.

Representative Barraclough went on to discuss models. He believes that if you have good data and can replicate what happened before, then you can make predictions. His concern is that we may not have good quality control on the model and he would like to see that developed before we use the model to make any major decisions.

In terms of recharge, Representative Barraclough believes it would follow the flow lines. He also believes that you would see about thirty-two percent of the effects of recharge after the first year, fifty-five percent after two years and by five years, seventy-eight percent.

In order to get through this problem, Representative Barraclough believes that we have to look at the aquifer with understanding of 1900 and now. We cannot just leave it to the model.

A question and answer period followed.

Mike Creamer, representing the Idaho Ground Water Appropriators, was the next speaker to address the group. He provided written initial comments maintained in the records of Legislative Services, marked as Attachment "E" of these minutes.

Mr. Creamer noted that the ground water users do not believe that the aquifer is "sick," mismanaged or over-appropriated. They do, however, believe that it is out of balance. He discussed the aquifer discharge to Thousand Springs as reflected in figure 1(b) of their written material.

Mr. Creamer set forth the policies the Idaho Ground Water Appropriators want to address:

- In terms of the prior appropriation doctrine, Mr. Creamer noted that if it were as simple as just first in time is first in right, we would have no need for judicial opinions, etc., There is a lot more involved.

- The focus, according to Mr. Creamer, should be on the maximum beneficial use

policy. “Community” encompasses the entire community, not just one segment of it. He noted that in *Schodde v. Twin Falls Water Co.*, 224 U.S. 107 (1912), the Supreme Court said that the means of diversion is not a part of the water right.

- Full economic development. According to Mr. Creamer, the policy of the ground water act was one of full economic development. Court’s have not gone with strictly a priority analysis.

Mr. Creamer went on to say that when we see decline in the aquifer we should not be surprised. In 1985, in the Swan Falls Agreement, it was determined that it would be taken down to 3900 cfs to manage the river.

In conclusion, he noted that all water rights are important but if we are to reach an agreement, we need to consider the concept of full economic development. We need to determine if we have reached such development or if we have exceeded it. We have to ask whether we need to adjust that policy.

Mr. Creamer also told the group that the Idaho Ground Water Appropriators would discuss their goals with the group at future meetings.

Karl Dreher, Director of the Idaho Department of Water Resources, was the next speaker. Director Dreher also provided the group with a written memorandum dated June 23, 2004 regarding the Swan Falls Agreement and Eastern Snake River Plain Aquifer, maintained in the records of Legislative Services, marked as Attachment “F” of these minutes.

Director Dreher indicated that the memorandum was being provided to the group in response to questions regarding the effect of the Swan Falls Agreement on conjunctive administration of ground water rights diverting from the Eastern Snake Plain Aquifer and surface water rights diverting from hydraulically-connected surface water sources. He also stated that the memorandum summarizes some of the relevant actions taken by the Department to date in implementing the Swan Falls Agreement.

After providing a background of the Swan Falls Agreement, Director Dreher reviewed the actions that the State of Idaho and the Department of Water Resources have taken following the Swan Falls Agreement. He noted that those actions are predicated on the premise that water rights from springs in the Thousand Springs Area and ground water rights from the ESPA are to be administered as being from hydraulically-connected sources under the prior appropriation doctrine as established by Idaho law and that the Agreement only defined the relationship between surface and ground water rights and non-consumptive hydropower rights held by Idaho Power. He also pointed out that the assertion by some that the Agreement also subordinated other spring users water rights is not clear on the face of the Agreement. He went on to state that, given the specificity with which the Agreement is drafted, it is logical to conclude that the parties would have expressly included a provision stating that other surface water rights from spring sources were also being subordinated by the Agreement had that been the intent of the

parties, particularly given the valuable property rights that would have been affected by such an interpretation.

Director Dreher also addressed policies of the State Water Plan and specifically how Policy 32F, adopted in 1986, was changed and replaced with Policy 5H by the Board in 1996. He commented that a natural reading of the policies is that they constitute a recognition by the Board that in applying the prior appropriation doctrine, various principles must be confronted such as the requirement that the holder of a water right employ a reasonable means of diversion, that exercise of a water right cannot unreasonably impede use of a water source by other lawful appropriators, and that the futile call doctrine is a potential defense to a delivery call against junior priority ground water rights. According to the Director, these principles, along with others embodied within the prior appropriation doctrine, provide the mechanisms for balancing development of our limited water resources with the protection of senior priority water rights and is consistent with the implementation of the Agreement by the Department.

Following concluding remarks by the co-chairs and a brief discussion regarding the upcoming meeting of the Expanded Natural Resources Interim Committee, the meeting was adjourned by Senator Noh at approximately 4:30 p.m.